

CLAIMS

What is claimed:

1. A mobile telephone for connecting to multiple wireless networks, comprising:
a cellular module for handling a call through a cellular telephone network; and
a wireless network module, operably connected to said cellular module, for handling a call through a wireless local area network (WLAN),
wherein said cellular module and said wireless network module transmit simultaneously,
and
said mobile telephone detects a WLAN access point and loads an operating WLAN profile for said wireless network module that configures said mobile telephone to site-specific WLAN network parameters.
2. The mobile telephone of claim 1, wherein said profile comprises at least one of a plurality of parameters saved into a memory of said mobile phone of voice compression protocols and Internet Protocol network addresses.
3. The mobile telephone of claim 1, wherein said profile is one of a plurality of profiles which comprise configuration parameters for a plurality of wireless networks comprising a plurality of wireless network locations.
4. The mobile telephone of claim 1, wherein said cellular module handles said calls using cellular network protocols, and
said wireless network module handles said calls on said WLAN using voice over Internet

protocols.

5. The mobile phone of claim 1, wherein, when said mobile phone enters a broadcast area of a wireless private branch exchange (PBX) network, said wireless network module senses said wireless PBX and loads a profile specific to said wireless PBX which enables said mobile phone to send and receive calls using a telephone number associated with said wireless PBX.

6. The mobile phone of claim 1, wherein, when said operating profile is loaded into said wireless network module, said wireless network module matches a network address from said profile with said WLAN, allowing said mobile telephone to transmit said call using said telephone number through said WLAN.

7. The mobile telephone of claim 1, wherein, when the mobile phone enters a home WLAN, said wireless network module senses said home WLAN, loads a profile specific to said home WLAN which configures said mobile phone for sending and receiving calls using a home telephone number.

8. The mobile telephone of claim 1, wherein the wireless network module senses broadcast signals from a plurality of different WLANs and loads one of a plurality of said profiles to configure voice over Internet Protocols for said mobile telephone that are pre-configured for each said WLAN.

9. The mobile telephone of claim 7, wherein, when said mobile telephone enters a hotspot network broadcast area, said wireless network module senses said hotspot network and loads one

of a plurality of said profiles to configure said mobile telephone to send and receive calls through said hotspot network using appropriate voice over Internet protocols.

10. The mobile telephone of claim 1, wherein said mobile phone cannot handoff a call between said cellular network and said WLAN.

11. The mobile telephone of claim 1, wherein, when said telephone is located in an overlapping cellular network and WLAN area, said cellular module detects said cellular network and loads a cellular module profile to configure said mobile telephone to send and receive calls on said cellular network, and

said wireless network module scans for WLAN signals and matches WLAN parameters with a stored profile that configures said mobile phone to access said WLAN using an authorization procedure that is active on said WLAN and registers said mobile telephone with a gateway on a network connected to said WLAN.

12. The mobile telephone of claim 1, wherein, when said phone receives both said cellular network call and said WLAN call, said phone may switch between the two calls using a call waiting procedure.

13. A mobile telephone for connecting to multiple wireless networks, comprising:

a cellular system that routes calls under cellular protocols;

a wireless network system, operably connected to said cellular module, that routes calls under voice over Internet protocol (VOIP) protocols through a wireless local area network (WLAN); and

a memory system, operably connected to said wireless network system, for saving a plurality of profiles network configuration parameters for said mobile telephone that match each different type of said WLAN with which said mobile telephone interacts,

wherein said cellular system and said wireless network system are configured to route calls simultaneously, and

said mobile telephone detects a specific WLAN and loads at least one of said profiles matching said specific WLAN.

14. The mobile telephone of claim 13, wherein each of said profiles comprises at least one of a plurality of parameters saved into a memory of said mobile phone of voice compression protocols and Internet Protocol network addresses.

15. The mobile phone of claim 13, wherein, when said mobile phone enters a broadcast area of a wireless private branch exchange (PBX) network, said wireless network system detects said wireless PBX and loads one of said profiles specific to said wireless PBX which enables said mobile phone to send and receive calls using a telephone number associated with said wireless PBX.

16. The mobile phone of claim 13, wherein, when one of said profiles loads into said wireless network system, said wireless network system matches a network address from said profile with said WLAN, allowing said mobile telephone to route calls through said WLAN.

17. The mobile telephone of claim 13, wherein said mobile phone cannot handoff a call between said cellular network and said WLAN.

18. The mobile telephone of claim 13, wherein, when said mobile telephone is located in an overlapping cellular network and WLAN area, said cellular system detects said cellular network and loads a cellular system profile to configure said mobile telephone to send and receive calls on said cellular network, and

said wireless network system scans for WLAN signals and matches WLAN parameters with a stored profile that configures said mobile phone to access said WLAN using an authorization procedure that is active on said WLAN and registers said mobile telephone with a gateway on a network connected to said WLAN.